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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,979	09/30/2003	Craig Henry Becker	AUS920030623US1	4982
35525	7590	07/27/2007		
IBM CORP (YA) C/O YEE & ASSOCIATES PC P.O. BOX 802333 DALLAS, TX 75380			EXAMINER LAZARO, DAVID R	
			ART UNIT 2155	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/674,979	<b>Applicant(s)</b> BECKER ET AL.	
	<b>Examiner</b> David Lazaro	<b>Art Unit</b> 2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 September 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/30/03</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Claims 1-43 are pending in this office action.

#### ***Information Disclosure Statement***

2. The IDS filed 09/30/2003 has been considered by the examiner.

#### ***Drawings***

3. The drawings filed 09/30/2003 are accepted by the examiner.

#### ***Claim Objections***

4. Claim 42 is objected to because of the following informalities: Claim 42 is directed to a method however based on the dependency, it should be directed to a computer program product. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1, 15, 29 and 43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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7. Claims 1, 15, 29 and 43 each recite the limitation "on the network". There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 101***

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claims 29-38 are rejected under 35 U.S.C. 101 because the claimed invention does not fall within one of the statutory categories.

10. Claim 29 is directed to "a computer program product in a computer readable medium". Page 21 of the specification states that examples of computer readable media include "transmission-type media... such as wireless communication links using transmission forms, such as, for example, radio frequency and light wave transmissions". Based on this evidence, the scope of the claimed computer readable medium includes signals such as radio frequency and light wave transmissions. This also applies for claims 30-38 which ultimately depend on claim 29.

11. As discussed in the *Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility* (excerpt provided at the end of the 101 section), the office's position is that signals do not fall within one of the four statutory classes of 35 U.S.C. 101. Therefore, based on the given evidence and the office's position, Claims 30-38 fail to fall within one of the four statutory categories and are ineligible for patent protection.

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12. Claims 29-38 are rejected under 35 U.S.C. 101 for failing to be structurally and functionally interconnected with software in such a manner to, in and of itself, enable any usefulness to be realized. Page 21 of the specification states that computer readable media include transmission-type media such as "digital and analog communication links" and "wired" links. Therefore it is clear that the scope of the claimed computer readable medium is intended to cover transmission media in the form digital, analog and wired communication links. Such media are not structurally and functionally interconnected to the software in a such a manner as to enable the software to act as a computer component and realize any functionality. This is also the case for claims 30-38 which ultimately depend on claim 29.

13. Claims 39-42 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 39-42 are directed to software per se. Computer programs not embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. Computer programs not embodied in computer-readable media do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. See MPEP 2106.01. For these reasons, Claim 8 is directed to non-statutory subject matter.

14. Note that any corrections should also take into consideration the 101 rejections of claims 29-38.

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15. For clarification of the office's position on signals, the following is from Annex IV, paragraph (c), pages 55-57, of the *Interim Guidelines for Examination of Patent*

*Applications for Patent Subject Matter Eligibility:*

" Claims that recite nothing but the physical characteristics of a form of energy, such as a frequency, voltage, or the strength of a magnetic field, define energy or magnetism, per se, and as such are nonstatutory natural phenomena. O'Reilly, 56 U.S. (15 How.) at 112-14. Moreover, it does not appear that a claim reciting a signal encoded with functional descriptive material falls within any of the categories of patentable subject matter set forth in § 101. First, a claimed signal is clearly not a "process" under § 101 because it is not a series of steps. The other three § 101 classes of machine, compositions of matter and manufactures "relate to structural entities and can be grouped as 'product' claims in order to contrast them with process claims." 1 D. Chisum, Patents § 1.02 (1994). The three product classes have traditionally required physical structure or material. "The term machine includes every mechanical device or combination of mechanical device or combination of mechanical powers and devices to perform some function and produce a certain effect or result." Corning v. Burden, 56 U.S. (15 How.) 252, 267 (1854). A modern definition of machine would no doubt include electronic devices which perform functions. Indeed, devices such as flip-flops and computers are referred to in computer science as sequential machines. A claimed signal has no physical structure, does not itself perform any useful, concrete and tangible result and, thus, does not fit within the definition of a machine.

A "composition of matter" "covers all compositions of two or more substances and includes all composite articles, whether they be results of chemical union, or of mechanical mixture, or whether they be gases, fluids, powders or solids." Shell Development Co. v. Watson, 149 F. Supp. 279, 280, 113 USPQ 265, 266 (D.D.C. 1957), aff'd, 252 F.2d 861, 116 USPQ 428 (D.C. Cir. 1958). A claimed signal is not matter, but a form of energy, and therefore is not a

composition of matter. The Supreme Court has read the term "manufacture" in accordance with its dictionary definition to mean "the production of articles for use from raw or prepared materials by giving to these materials new forms, qualities, properties, or combinations, whether by hand-labor or by machinery." *Diamond v. Chakrabarty*, 447 U.S. 303, 308, 206 USPQ 193, 196-97 (1980) (quoting *American Fruit Growers, Inc. v. Brogdex Co.*, 283 U.S. 1, 11, 8 USPQ 131, 133 (1931), which, in turn, quotes the Century Dictionary). Other courts have applied similar definitions. See *American Disappearing Bed Co. v. Arnaelsteen*, 182 F. 324, 325 (9th Cir. 1910), cert. denied, 220 U.S. 622 (1911). These definitions require physical substance, which a claimed signal does not have. Congress can be presumed to be aware of an administrative or judicial interpretation of a statute and to adopt that interpretation when it re-enacts a statute without change. *Lorillard v. Pons*, 434 U.S. 575, 580 (1978). Thus, Congress must be presumed to have been aware of the interpretation of manufacture in *American Fruit Growers* when it passed the 1952 Patent Act. A manufacture is also defined as the residual class of product. 1 Chisum, § 1.02[3] (citing W. Robinson, *The Law of Patents for Useful Inventions* 270 (1890)).

A product is a tangible physical article or object, some form of matter, which a signal is not. That the other two product classes, machine and composition of matter, require physical matter is evidence that a manufacture was also intended to require physical matter. A signal, a form of energy, does not fall within either of the two definitions of manufacture. Thus, a signal does not fall within one of the four statutory classes of § 101. On the other hand, from a technological standpoint, a signal encoded with functional descriptive material is similar to a computer-readable memory encoded with functional descriptive material, in that they both create a functional interrelationship with a computer. In other words, a computer is able to execute the encoded functions, regardless of whether the format is a disk or a signal. These interim guidelines propose that such signal claims are ineligible for patent protection because they do not fall

within any of the four statutory classes of § 101. Public comment is sought for further evaluation of this question.”

***Claim Rejections - 35 USC § 102***

16. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

17. Claims 1, 2, 4, 8, 9, 11-13, 15, 16, 18, 22, 23, 25-27, 29, 30, 32, 36, 37, 39-41 and 43 are rejected under 35 U.S.C. 102(b) as being 102(b) by U.S. Patent 6,209,089 by Selitrennikoff et al. (Hereinafter Selit).

18. With respect to claims 1, 15 and 29, Selit teaches a method (and corresponding data processing system and computer program product), in a data processing system for conducting an inventory of the data processing system, the method comprising:

launching a basic input output system during a boot process for the data processing system (Col. 9 lines 50-52: boot rom run program before operating system boots), wherein the basic input output system creates a hardware report of the data processing system (Col. 13 lines 20-29: detection of hardware information); and

sending the hardware report to a remote data processing system on the network (Col. 18 lines 1-18 and lines 42-60: client reports detected hardware information such as the motherboard and NIC ID's).



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19. With respect to claims 2, 16, and 30, Selit further teaches wherein the remote data processing system is a listener server (In Selit: Col. 7 lines 51 - Col. 8 line 3).

20. With respect to claims 4, 18 and 32, Selit further teaches selecting a default listener server as the remote data processing (Col. 15 lines 51-60 and Col. 16 lines 20-35).

21. With respect to claims 8, 22 and 36, Selit further teaches wherein hardware report is used to identify changes to the data processing system (In Selit: Col. 18 lines 1-18 and lines 42-60).

22. With respect to claims 9, 23 and 37, Selit further teaches wherein the listener server runs asset management software (In Selit: Col. 7 line 58 - Col. 9 line 37).

23. With respect to claims 11, 25 and 39, Selit teaches a method (and corresponding data processing system and computer program product) in a data processing system for identifying hardware in the data processing system, the method comprising:

responsive to booting of the computer (Col. 9 lines 50-52: boot rom runs program before operating system boots), identifying the hardware in the data processing system to form an inventory prior to passing control to an operating system (Col. 13 lines 20-29: detection of hardware information);

creating report containing the inventory of the hardware prior to passing control to the operating system (Col. 13 lines 20-29: detection of hardware information); and

sending the report to a default listener server on the network using a communications interface prior to passing control to the operating system (Col. 18 lines

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1-18 and lines 42-60: client reports detected hardware information such as the motherboard and NIC ID's).

24. With respect to claims 12, 26 and 40, Selit further teaches wherein the method is implemented in a basic input output system (Col. 9 lines 50-52: boot rom runs program before operating system boots).

25. With respect to claims 13, 27 and 41, Selit further teaches wherein the listener server is a default listener server (Col. 15 lines 51-60 and Col. 16 lines 20-35).

26. With respect to claim 43, Selit teaches a data processing system comprising:  
a bus system (Col. 9 lines 38-67);

a memory connected to the bus system, wherein the memory includes a set of instructions; and a processing unit connected to the bus system, wherein the processing unit executes the set of instructions to launch a basic input output system during a boot process for the data processing system (Col. 9 lines 50-52: boot rom run program before operating system boots), wherein the basic input output system creates a hardware report of the data processing system (Col. 13 lines 20-29: detection of hardware information) and to send the hardware report to a remote data processing system on the network (Col. 18 lines 1-18 and lines 42-60: client reports detected hardware information such as the motherboard and NIC ID's).

***Claim Rejections - 35 USC § 103***

27. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

28. Claims 3, 17 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Selit in view of U.S. Patent Application Publication 2004/0109017 by Rothman et al. (Rothman).

29. With respect to claims 3, 17 and 31, Selit teaches all the limitations of claim 2, 16 and 30 respectively, but does not explicitly disclose wherein the report is formatted in extensible mark up language, hypertext markup language, text in a flat file, or simple network management protocol.

Rothman teaches hardware information can be reported in a number of formats including extensible markup language and hypertext markup language (Page 2 [0016]-[0017]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the invention of Selit and modify it such that the report is formatted in extensible mark up language, hypertext markup language, text in a flat file, or simple network management protocol. One would be motivated to have this, as this allows simple network access through a web browser, for example (In Rothman: Page 2 [0016] - [0017]).

30. Claims 5-7, 19-21 and 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Selit in view of U.S. Patent 2002/0078188 by Anand et al. (Anand).

31. With respect to claim 5, 19 and 33, Selit teaches all the limitations of claims 1 15 and 29 respectively, and further teaches identifying listener servers on the network and saving a selected network server as the default listener server for reporting hardware changes in the data processing system (Col. 15 lines 51-57 and Col. 16 lines 20-35: a number of servers can handled the request, one of them will be selected and assigned).

Selit does not explicitly disclose presenting a list of the listener servers, wherein user input is received containing a selection of a select listener server for reporting hardware changes in the data processing system. Anand teaches presenting to the user a list of listening servers for the user to choose from (Page 2 [0015]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the invention of Selit and modify it as indicated by Anand such that it comprises identifying listener servers on the network; presenting a list of the listener servers, wherein user input is received containing a selection of a select listener server for reporting hardware changes in the data processing system; and saving the selection as a default listener server. One would be motivated to have this, as it improves upon the standard implementation of the selection of a listening server (In Anand: Page 2 [0015]).

32. With respect to claims 6, 20 and 34, Selit further teaches wherein the identifying step includes: broadcasting a network message requesting listener servers on the

network to announce themselves; and compiling response from the listener servers to form the list (In Anand: Page 2 [0015] and Page 1 [0009]-[0011]).

33. With respect to claims 7, 21 and 35, Selit further teaches wherein the identifying, presenting, and saving steps are initiated in response to an absence of a default listener server being present on the network (In Anand: Page 1 [0009]-[0011]).

34. Claims 10, 24, 38 and 14, 28 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Selit in view of U.S. Patent 2002/0083183 by Pujare et al. (Pujare).

35. With respect to claims 10, 24 and 38, Selit teaches all the limitations of claims 1, 15 and 29 respectively, but does not explicitly disclose waiting for an acknowledgement of the hardware report from the remote data processing system; responsive to an absence of an acknowledgment, selecting a second remote data processing system; and sending the hardware report to the second remote data processing system.

Pujare teaches a client that selects a second server from a list of servers when the original server does not respond to an original message sent from the client. The message will be resent to the selected second server. (In Pujare: Page 13 [0236]-[0238]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the invention disclosed by Selit and modify it as indicated by Pujare such that it further comprises waiting for an acknowledgement of the hardware report from the remote data processing system; responsive to an absence of an

acknowledgment, selecting a second remote data processing system; and sending the hardware report to the second remote data processing system. One would be motivated to have this, as it is desirable to provide a failover mechanism (In Pujare: Page 13 [0236]-[0238]).

36. With respect to claims 14, 28 and 42, Selit teaches all the limitations of claims 11, 25 and 39 respectively, but does not explicitly disclose responsive to an absence of the default listener server, identifying listener servers on the network; presenting a list of the listener servers for selection; and responsive to a selection of a listener server, saving the selection as the default listener server..

Pujare teaches a client that selects a second server from a list of servers when the original server does not respond to an original message sent from the client. The message will be resent to the selected second server. (In Pujare: Page 13 [0236]-[0238]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the invention disclosed by Selit and modify it as indicated by Pujare such that it further comprises responsive to an absence of the default listener server, identifying listener servers on the network; presenting a list of the listener servers for selection; and responsive to a selection of a listener server, saving the selection as the default listener server.. One would be motivated to have this, as it is desirable to provide a failover mechanism (In Pujare: Page 13 [0236]-[0238]).

***Conclusion***

37. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

38. U.S. Patent 7,124,412 by Fish et al. - Discloses a BIOS routine that can determine hardware configuration and status and store such information to a log.

39. U.S. Patent 6,711,676 by Zomaya et al. - Discloses the use of hardware information to determine upgrade information.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Lazaro whose telephone number is 571-272-3986. The examiner can normally be reached on 8:30-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

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USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'David Lazaro', with a stylized flourish at the end.

David Lazaro  
July 21, 2007